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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,191	08/03/2001	Akiko Asami	7217/65202	7521

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COOPER & DUNHAM LLP
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

CHEN, PO WEI

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 06/23/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/922,191	Applicant(s) ASAMI, AKIKO	
	Examiner Po-Wei (Dennis) Chen	Art Unit 2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-10,12,14-19,21,23-28,30 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-10,12,14-19,21,23-28,30 and 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

In response to an Amendment received on April 1, 2004. This action is non-final.

Claims 1, 3, 5-10, 12, 14-19, 21, 23-28, 30 and 32-36 are pending in this application.

Claims 1, 10, 19 and 28 are independent claims.

The present title of the invention is "Information Processing Apparatus, Information Processing Method, Program Storage Medium and Program".

The Group Art Unit of the Examiner case is now 2676. Please use the proper Art Unit number to help us serve you better.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5-10, 12, 14-19, 21, 23-28, 30 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota (US 6,437,797) in view of Kaye et al. (US 6,515,659; refer to as Kaye herein) and Pulley, IV et al. (US 6,222,557; refer to as Pulley herein).

3. Regarding claim 1, Ota discloses an image reproducing method comprising:

An information processing apparatus (see abstract);

Display means (see 54-55 of column 3 and element 24 of Fig. 1);

Image data inputting means for inputting image data; time information inputting means for inputting time information in connection with said image data; position

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information inputting means for inputting position information in connection with said image data (see lines 36-51 of column 1 and Fig. 1);

Map display control means for controlling display of a map image (see lines 8-27 of column 4);

Position icon display control means for controlling display of position icons indicative of said time information and said position information on the map image whose display is controlled by said map display control means (see lines 6-9 of column 2 and lines 17-21 of column 4);

Thumbnail icon display control means for controlling a display of thumbnail icons indicative of said image data (see lines 58-67 of column 5 and line 1 of column 6 and Fig. 9 and 14);

Position icon data inputting means for inputting data representative of said position icon; and said thumbnail icon display control means controlling a sequential time series display of the thumbnail icons in response to said time information corresponding to the data representative of the position icons inputted by said position icon data inputting means and in response to the changing map viewpoint (line 36 of column 1 to line 18 of column 2, lines 43-46 of column 3, lines 7-17 of column 6 and lines 16-24 of column 8 and Fig. 9-10; while claim recites sequential time series display, it is noted that the system is able to control the thumbnail icon display by capturing order in accordance with time information from GPS reading to show image-capturing route. Thus, limitation of sequential time series display is met. Also, it is noted that the thumbnail images are displayed according to the position captured which correspond to map viewpoint.

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It is noted that Ota does not disclose concave/convex display control means for controlling topographic concave/convex display of the map image whose display is controlled by said map display control means. However, this is known in the art taught by Kaye. Kaye disclose a method for creating realistic smooth three-dimensional images comprising a display of a topographical map through inputs by controlling the concave and convex to define the contour paths (see lines 11-17 and 40-44 of column 6 and Fig. 5A-F and 8A-F). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Kaye to provide a realistic-looking map with smooth rounded depth contours (see lines 60-62 of column 1, Kaye). Also, it is noted that Kaye discloses that a topographical map is defined with associated altitude information (see lines 11-17 of column 6, Kaye), which is being captured by Ota using GPS system (see lines 18-22 of column 3, Ota), Ota will be able to also create a topographical map for his invention to provide a realistic looking map.

The combination of Ota and Kaye does not disclose map display control means changes a viewpoint of the map image in response to pitch and yaw information entered by user. Pulley discloses a navigation system for viewing 3D data lanscape utilizing the method (line 55 of column 4 to line 42 of column 5 and lines 8-21 of column 6). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Ota to substitute the viewpoint changing control for the viewpoint changing control of Pulley because Pulley teaches by utilizing the navigation control will provide the user a more user-friendly interface display for navigating the 3D display without letting user become disorientated and/or lost (lines 30-42 of column 3).

4. Regarding claim 3, Ota discloses an image reproducing method comprising:

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Thumbnail icon data inputting means for inputting data representative of said thumbnail icons, said map display control means controlling a display region of the map image based on said position information corresponding to the data representative of the thumbnail icons inputted by said thumbnail icon data inputting means (see lines 45-51 of column 1 and line 6-18 of column 2).

5. Regarding claim 5, it is noted that Ota does not disclose concave/convex display control means for controlling the topographic concave/convex display of said map image controls the topographic concave/convex display based on contour data of a topography. However, this is known in the art taught by Kaye, as statements presented above, with respect to claim 1 are incorporated herein.

6. Regarding claim 6, it is noted that Ota does not disclose concave/convex display control means for controlling the topographic concave/convex display of said map image controls the topographic concave/convex display based on arbitrary illumination direction data and shadow data associated with the arbitrary illumination direction data. However, this is known in the art taught by Kaye. Kaye disclose a method for creating realistic smooth three-dimensional images comprising a display of a topographical map through inputs by controlling the concave and convex to define the contour paths (see lines 11-17 and 40-44 of column 6 and Fig. 5A-F and 8A-F). Also, it is noted that the brightness (illumination and shadow data) can be utilized to further define the image (see lines 51-54 of column 19 and Fig. 5A-F). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Kaye to provide a realistic-looking map with smooth rounded depth contours (see lines 60-62 of column 1, Kaye).

7. Regarding claim 7, Ota discloses an image reproducing method comprising:

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Position icon time series display control means for controlling a time series display of said position icons in said map image based on said time information (see lines 36-51 of column 1, lines 6-18 of column 2 and lines 43-46 of column 3);

Connection line display control means for controlling a connection line display between a plurality of said position icons (see lines 7-17 of column 6 and Fig. 10).

8. Regarding claims 8 and 9, Ota discloses an image reproducing method comprising:

The map image whose display is controlled by said map display control means and a thumbnail icon display displayed on said map image by said thumbnail icon display control means are moved by at least one of horizontal movement, vertical movement, clockwise or counterclockwise rolling movement, upward or downward pitching movement and leftward or rightward yawing movement (see lines 62-67 of column 5 and line 1 of column 6 and Fig. 14). While claim recites horizontal movement, vertical movement, clockwise or counterclockwise rolling movement, upward or downward pitching movement and leftward or rightward yawing movement, it is clear that by changing the position data (latitude, longitude and altitude) (see lines 18-22 of column 3), the thumbnail icon is moved in one of the movements. Furthermore, user will be able to change the location via pointing device (see lines 4-9 of column 10). Thus, limitation of claim is met.

9. Regarding claims 10-18, as statements presented above, with respect to claims 1-9 are incorporated herein.

10. Regarding claims 19-27, as statements presented above, with respect to claims 1-9 are incorporated herein. Also see lines 1-56 of column 3 and Fig. 1.

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11. Regarding claims 28-36, as statements presented above, with respect to claims 1-9 are incorporated herein. Also see lines 1-56 of column 3 and Fig. 1.

Response to Arguments

12. Applicant's arguments with respect to claims 1, 10, 19 and 28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Po-Wei (Dennis) Chen whose telephone number is (703) 305-8365. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C Bella can be reached on (703) 308-6829. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Po-Wei (Dennis) Chen
Examiner
Art Unit 2676

Po-Wei (Dennis) Chen
June 17, 2004


MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600